

INDIANA

WELLHEAD

PROTECTION

About 72 percent of Indiana's citizens rely on ground water for drinking water.

Wellhead protection is a strategy to protect ground water drinking supplies from pollution that can threaten health, lives and community development.

Authority

1989 Ground Water Protection ActIC13-18-17-6

Authorizes the Indiana Water Pollution Control Board to adopt rules establishing “wellfield protection zones” for community public water supply (PWS) systems;

State agencies may not permit activities within the wellhead protection zones that would violate the rules or interfere with the purpose of the rule.

Milestones	
Nov. 13, 1995	U.S. Environmental Protection Agency approves Indiana’s wellhead protection program contingent upon final adoption of the state’s wellhead protection rule.
July 10, 1996	Wellhead Protection rule adopted, later revised.
Dec. 16, 1996	Revised rule re-adopted.
Feb. 28, 1997	Governor signs rule.
March 28, 1997	Rule becomes effective.
April 7, 1997	EPA formally approves Indiana wellhead protection program.

What You Need To Know

Wellhead protection planning makes communities, businesses and citizens more aware of the activities that could harm ground water.

The small southwestern Indiana town of Petersburg is among those that experienced wellhead protection early on. IDEM worked with the town in a pilot project to get a first-hand perspective on the realities of initiating wellhead protection in a small community.

"Wellhead protection is a great way to work with the community and the state to prevent problems."

Petersburg Mayor Randy Harris

Applicability

The Safe Drinking Water Act mandates a wellhead program for all PWS systems using ground water for drinking water while the Ground Water Protection Act and the rule are mandated for community PWS systems only.

- ◆ A *community* PWS system is defined at 327 IAC 8-2-1 as one that provides water to at least 15 service connections used by year-round residents or regularly serves water to at least 25 year-round residents. All community PWS systems are required to complete the elements of Indiana's wellhead protection program.
- ◆ *Non-community* PWS systems, which are often campgrounds, churches, restaurants, factories and golf courses, are encouraged to voluntarily apply wellhead protection.

Required Steps

Phase I

◆ *Establish Local Planning Team*

Community systems are required to develop a planning team to guide all aspects of the wellhead protection program. This team must have representation from at least one party affected by the program (e.g., industry; agriculture; or police, fire, city or county administration). The formation of the local planning team must be legally advertised in the community.

◆ *Delineate Wellhead Protection Area*

All systems with an annual average pumping rate of 100,000 gallons per day and above are required to define their WHPA through analytical, semi-analytical or numerical modeling. The area defined must represent a minimum five-year time of travel.

Systems with an annual average pumping rate of less than 100,000 gallons per day are allowed to use a fixed radius delineation of 3,000 feet.

◆ *Identify and Inventory Potential Contamination Sources*

Systems are required to identify, inventory and map all potential sources of contamination within the delineated WHPA. The inventory must contain relevant information about each potential source, including location, owner and operator, applicable environmental permit numbers, type of operation, and whether the facility is operating.

◆ *Develop Management Plan for Potential Contamination Sources*

Community systems are required to submit a strategy for managing potential sources of contamination. Systems also are required to have a public outreach component to their wellhead protection program. At a minimum, all potential contamination sources must be informed of their location within a WHPA, about the consequences of ground water contamination, and the methods available for preventing contamination.

◆ *Develop Contingency Plan*

Systems are required to develop plans that document procedures to follow in case of contamination (e.g., spills, unpermitted releases). The plan must provide a list of emergency contacts and proposed alternate water supplies.

Phase II

◆ *Implement Management Plan*

After a specified period of time (see Implementation Table), systems are required to document implementation and update their management strategy.

If you don't know the size of your public water supply system, check the inventory verification memo from IDEM. In this memo the system's population is listed.

If the memo is not available or incorrect, contact IDEM Drinking Water Branch at (800) 451-6027, press 0 and ask for ext. 308-3321, or (317) 308-3321.

New Wells

IDEM's Drinking Water Branch requires well site approval before a construction permit is granted for a new well. Wellhead protection is incorporated into the well site approval process. PWS systems installing new wells or wellfields are required to submit the following prior to an inspection of the new well site:

- ◆ A 1:24,000 scale map of the well site (USGS 7.5 minute series topographic map);

- ◆ A detailed map with new well site, delineated WHPA, required setbacks and easements;
- ◆ A potential source of contamination inventory within the proposed WHPA as required by 327 IAC 8-4.1(8)(3); and
- ◆ A schedule for development of a Phase I wellhead protection plan.

IDEM's Drinking Water Branch staff reviews well site and construction plans.

Statewide Implementation

The wellhead protection program is being implemented in two phases. The schedule for submittal of plans and information, then updates, is based on the size of the PWS system in terms of population served (see Implementation Table).

- 1 Systems establish their own wellhead protection program – community planning, delineation, identification of potential contamination sources, strategy for managing potential sources, contingency planning, and public outreach and education.
- 2 Systems modify their wellhead protection plan, as necessary, due to refined information, changes in potential contamination source inventory, and documentation of the management strategy implementation.

This phased-in approach allows systems adequate time for implementing management measures. Certain management methods (e.g., overlay zoning) may take a number of years to move through the local administration. Also, design or construction criteria for sources (e.g., secondary containment, waste minimization) will take time to complete because these measures will require potential contamination sources' participation.

IDEM is providing detailed guidelines to help communities and public water supply systems develop and implement wellhead protection programs. For more information, call IDEM's Drinking Water Branch at (800) 451-6027, press 0 and ask for ext. 308-3321, or (317) 308-3321.

IDEM will use a status report system and survey results to track the progress of program development and implementation, and identifying problems encountered by systems in the wellhead protection program.

What you can do

If your water is supplied by a water company, contact them to volunteer your time. Public water suppliers are not only required by law to have affected parties such as yourself represented on the local planning team, they want and need your input.

If it's too late to become a member of the local planning team, find out the planning and public meeting schedule, review draft materials as they're developed and submit comments in writing.

If your business provides water to the public or employees and the water isn't supplied by a privately-owned or publicly-operated water company, you are encouraged to go through the wellhead protection planning and implementation process. Your business may be a restaurant, factory, golf course, resort, recreational park, church or school. Let your IDEM inspector know you're interested or call IDEM's Drinking Water Branch at (800) 451-6027, press 0 and ask for ext. 308-3321, or (317) 308-3321.



Indiana Department of
Environmental Management



Indiana Wellhead Protection

Note: *The effective date of Indiana's wellhead protection rule 327 IAC 8-4.1 is March 28, 1997. This brochure provides an overview of the program.*

For a copy of the rule, send \$3.00 with your request to Legislative Services Agency, 200 W. Washington St., Room 230, Indianapolis, IN 46204. Cost is \$1.35 if you pick up your copy in person. The rule also is on IDEM's World Wide Web site at:

www.state.in.us/idem/owm/index.html

Order more copies of this brochure by calling: (800) 451-6027, press 0 and ask for ext. 3-1044, or (317) 233-1044.

PHASE I					PHASE II				
Public Water Supply System Size (population served)	Submittal Due	Submittal Requirements			Submittal Time (years from Phase I Approval)	Submittal and Update Requirements			
Large More than 50,000	2000	<ul style="list-style-type: none">Names, roles and affiliations of local planning team membersWellhead protection area (WHPA) delineation, including:<ul style="list-style-type: none">Summary of geologic and hydrologic conditionsModel input dataJustification of model choicePotential contamination sources inventory			5	<ul style="list-style-type: none">Comprehensive wellhead protection programUpdated implementation scheduleUpdated WHPA delineation, considering any new dataUpdated potential contamination sources inventoryReport of any problems or concernsRevised contingency plan if needed			
					7				
Medium 3,300 to 50,000	2001	<ul style="list-style-type: none">Management strategy with implementation schedule				<ul style="list-style-type: none">Documentation to confirm:<ul style="list-style-type: none">Sanitary setback area meets requirementsAbandoned wells are identifiedWellhead is secured from unauthorized accessAll potential contamination sources within WHPA are managedSigns are posted along WHPA perimeterPublic education is ongoingAny new ground water contamination within WHPA is reported			
Small Fewer than 3,300	2002	<ul style="list-style-type: none">Contingency planDescription of public participationDescription of public education program			10				

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Wellhead Protection Program

IDEM
Office of Water Management

Indiana
Wellhead
Protection

"Indiana has a history of leadership when it comes to protecting our citizens' water."

Governor Frank O'Bannon



can do....

What you

need to know....